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Leu Trp Lys Cys Asp Gly Asp Glu Asp Cys Val Asp Gly Ser Asp Glu
    50                  55                  60
Lys Asn Cys Val Lys Lys Thr Cys Ala Glu Ser Asp Phe Val Cys Asn
65                  70                  75                  80
Asn Gly Gln Cys Val Pro Ser Arg Trp Lys Cys Asp Gly Asp Pro Asp
                85                  90                  95
Cys Glu Asp Gly Ser Asp Glu Ser Pro Glu Gln Cys His Met Arg Thr
            100                 105                 110
Cys Arg Ile His Glu Ile Ser Cys Gly Ala His Ser Thr Gln Cys Ile
        115                 120                 125
Pro Val Ser Trp Arg Cys Asp Gly Glu Asn Asp Cys Asp Ser Gly Glu
    130                 135                 140
Asp Glu Glu Asn Cys Gly Asn Ile Thr Cys Ser Pro Asp Glu Phe Thr
145                 150                 155                 160
Cys Ser Ser Gly Arg Cys Ile Ser Arg Asn Phe Val Cys Asn Gly Gln
                165                 170                 175
Asp Asp Cys Ser Asp Gly Ser Asp Glu Leu Asp Cys Ala Pro Pro Thr
            180                 185                 190
Cys Gly Ala His Glu Phe Gln Cys Ser Thr Ser Ser Cys Ile Pro Ile
        195                 200                 205
```

```
Ser Trp Val Cys Asp Asp Asp Ala Asp Cys Ser Asp Gln Ser Asp Glu
    210                 215                 220
Ser Leu Glu Gln Cys Gly Arg Gln Pro Val Ile His Thr Lys Cys Pro
225                 230                 235                 240
Ala Ser Glu Ile Gln Cys Gly Ser Gly Glu Cys Ile His Lys Lys Trp
                245                 250                 255
Arg Cys Asp Gly Asp Pro Asp Cys Lys Asp Gly Ser Asp Glu Val Asn
            260                 265                 270
Cys Pro Ser Arg Thr Cys Arg Pro Asp Gln Phe Glu Cys Glu Asp Gly
        275                 280                 285
Ser Cys Ile His Gly Ser Arg Gln Cys Asn Gly Ile Arg Asp Cys Val
    290                 295                 300
Asp Gly Ser Asp Glu Val Asn Cys Lys Asn Val Asn Gln Cys Leu Gly
305                 310                 315                 320
Pro Gly Lys Phe Lys Cys Arg Ser Gly Glu Cys Ile Asp Ile Ser Lys
                325                 330                 335
Val Cys Asn Gln Glu Gln Asp Cys Arg Asp Trp Ser Asp Glu Pro Leu
            340                 345                 350
Lys Glu Cys His Ile Asn Glu Cys Leu Val Asn Asn Gly Gly Cys Ser
        355                 360                 365
His Ile Cys Lys Asp Leu Val Ile Gly Tyr Glu Cys Asp Cys Ala Ala
    370                 375                 380
Gly Phe Glu Leu Ile Asp Arg Lys Thr Cys Gly Asp Ile Asp Glu Cys
385                 390                 395                 400
Gln Asn Pro Gly Ile Cys Ser Gln Ile Cys Ile Asn Leu Lys Gly Gly
                405                 410                 415
Tyr Lys Cys Glu Cys Ser Arg Gly Tyr Gln Met Asp Leu Ala Thr Gly
            420                 425                 430
Val Cys Lys Ala Val Gly Lys Glu Pro Ser Leu Ile Phe Thr Asn Arg
        435                 440                 445
Arg Asp Ile Arg Lys Ile Gly Leu Glu Arg Lys Glu Tyr Ile Gln Leu
    450                 455                 460
Val Glu Gln Leu Arg Asn Thr Val Ala Leu Asp Ala Asp Ile Ala Ala
465                 470                 475                 480
Gln Lys Leu Phe Trp Ala Asp Leu Ser Gln Lys Ala Ile Phe Ser Ala
                485                 490                 495
Ser Ile Asp Asp Lys Val Gly Arg His Val Lys Met Ile Asp Asn Val
            500                 505                 510
Tyr Asn Pro Ala Ala Ile Ala Val Asp Trp Val Tyr Lys Thr Ile Tyr
        515                 520                 525
Trp Thr Asp Ala Ala Ser Lys Thr Ile Ser Val Ala Thr Leu Asp Gly
    530                 535                 540
Thr Lys Arg Lys Phe Leu Phe Asn Ser Asp Leu Arg Glu Pro Ala Ser
545                 550                 555                 560
Ile Ala Val Asp Pro Leu Ser Gly Phe Val Tyr Trp Ser Asp Trp Gly
                565                 570                 575
Glu Pro Ala Lys Ile Glu Lys Ala Gly Met Asn Gly Phe Asp Arg Arg
            580                 585                 590
Pro Leu Val Thr Ala Asp Ile Gln Trp Pro Asn Gly Ile Thr Leu Asp
        595                 600                 605
Leu Ile Lys Ser Arg Leu Tyr Trp Leu Asp Ser Lys Leu His Met Leu
    610                 615                 620
Ser Ser Val Asp Leu Asn Gly Gln Asp Arg Arg Ile Val Leu Lys Ser
625                 630                 635                 640
Leu Glu Phe Leu Ala His Pro Leu Ala Leu Thr Ile Phe Glu Asp Arg
                645                 650                 655
Val Tyr Trp Ile Asp Gly Glu Asn Glu Ala Val Tyr Gly Ala Asn Lys
            660                 665                 670
Phe Thr Gly Ser Glu Leu Ala Thr Leu Val Asn Asn Leu Asn Asp Ala
```

```
        675                 680                 685
Gln Asp Ile Ile Val Tyr His Glu Leu Val Gln Pro Ser Gly Lys Asn
    690                 695                 700
Trp Cys Glu Glu Asp Met Glu Asn Gly Gly Cys Glu Tyr Leu Cys Leu
705                 710                 715                 720
Pro Ala Pro Gln Ile Asn Asp His Ser Pro Lys Tyr Thr Cys Ser Cys
                725                 730                 735
Pro Ser Gly Tyr Asn Val Glu Glu Asn Gly Arg Asp Cys Gln Ser Thr
            740                 745                 750
Ala Thr Thr Val Thr Tyr Ser Glu Thr Lys Asp Thr Asn Thr Thr Glu
        755                 760                 765
Ile Ser Ala Thr Ser Gly Leu Val Pro Gly Gly Ile Asn Val Thr Thr
    770                 775                 780
Ala Val Ser Glu Val Ser Val Pro Pro Lys Gly Thr Ser Ala Ala Trp
785                 790                 795                 800
Ala Ile Leu Pro Leu Leu Leu Leu Val Met Ala Ala Val Gly Gly Tyr
                805                 810                 815
Leu Met Trp Arg Asn Trp Gln His Lys Asn Met Lys Ser Met Asn Phe
            820                 825                 830
Asp Asn Pro Val Tyr Leu Lys Thr Thr Glu Glu Asp Leu Ser Ile Asp
        835                 840                 845
Ile Gly Arg His Ser Ala Ser Val Gly His Thr Tyr Pro Ala Ile Ser
    850                 855                 860
Val Val Ser Thr Asp Asp Asp Leu Ala
865                 870
```

<210> 10
<211> 873
<212> PRT
<213> Rattus norvigicus

<400> 10

```
Met Gly Thr Ser Ala Arg Trp Ala Leu Trp Leu Leu Leu Ala Leu Cys
 1               5                  10                  15
Trp Ala Pro Arg Asp Ser Gly Ala Thr Ala Ser Gly Lys Lys Ala Lys
            20                  25                  30
Cys Asp Ser Ser Gln Phe Gln Cys Thr Asn Gly Arg Cys Ile Thr Leu
        35                  40                  45
Leu Trp Lys Cys Asp Gly Asp Glu Asp Cys Thr Asp Gly Ser Asp Glu
    50                  55                  60
Lys Asn Cys Val Lys Lys Thr Cys Ala Glu Ser Asp Phe Val Cys Lys
65                  70                  75                  80
Asn Gly Gln Cys Val Pro Asn Arg Trp Gln Cys Asp Gly Asp Pro Asp
                85                  90                  95
Cys Glu Asp Gly Ser Asp Glu Ser Pro Glu Gln Cys His Met Arg Thr
            100                 105                 110
Cys Arg Ile Asn Glu Ile Ser Cys Gly Ala Arg Ser Thr Gln Cys Ile
        115                 120                 125
Pro Glu Ser Trp Arg Cys Asp Gly Glu Asn Asp Cys Asp Asn Gly Glu
    130                 135                 140
Asp Glu Glu Asn Cys Gly Asn Ile Thr Cys Ser Ala Asp Glu Phe Thr
145                 150                 155                 160
Cys Ser Ser Gly Arg Cys Val Ser Arg Asn Phe Val Cys Asn Gly Gln
                165                 170                 175
Asp Asp Cys Asp Asp Gly Ser Asp Glu Leu Asp Cys Ala Pro Pro Thr
            180                 185                 190
Cys Gly Ala His Glu Phe Gln Cys Arg Thr Ser Ser Cys Ile Pro Leu
        195                 200                 205
```

```
Ser Trp Val Cys Asp Asp Asp Ala Asp Cys Ser Asp Gln Ser Asp Glu
    210                 215                 220
Ser Leu Glu Gln Cys Gly Arg Gln Pro Val Ile His Thr Lys Cys Pro
225                 230                 235                 240
Thr Ser Glu Ile Gln Cys Gly Ser Gly Glu Cys Ile His Lys Lys Trp
                245                 250                 255
Arg Cys Asp Gly Asp Pro Asp Cys Lys Asp Gly Ser Asp Glu Val Asn
            260                 265                 270
Cys Pro Ser Arg Thr Cys Arg Pro Asp Gln Phe Glu Cys Glu Asp Gly
        275                 280                 285
Ser Cys Ile His Gly Ser Arg Gln Cys Asn Gly Ile Arg Asp Cys Val
    290                 295                 300
Asp Gly Ser Asp Glu Val Asn Cys Lys Asn Val Asn Gln Cys Leu Gly
305                 310                 315                 320
Pro Gly Lys Phe Lys Cys Arg Ser Gly Glu Cys Ile Asp Ile Thr Lys
                325                 330                 335
Val Cys Asp Gln Glu Gln Asp Cys Arg Asp Trp Ser Asp Glu Pro Leu
            340                 345                 350
Lys Glu Cys His Ile Asn Glu Cys Leu Val Asn Asn Gly Gly Cys Ser
        355                 360                 365
His Ile Cys Lys Asp Leu Val Ile Gly Tyr Glu Cys Asp Cys Ala Ala
    370                 375                 380
Gly Phe Glu Leu Ile Asp Arg Lys Thr Cys Gly Asp Ile Asp Glu Cys
385                 390                 395                 400
Gln Asn Pro Gly Ile Cys Ser Gln Ile Cys Ile Asn Leu Lys Gly Gly
                405                 410                 415
Tyr Lys Cys Glu Cys Ser Arg Gly Tyr Gln Met Asp Leu Ala Thr Gly
            420                 425                 430
Val Cys Lys Ala Val Gly Lys Glu Pro Ser Leu Ile Phe Thr Asn Arg
        435                 440                 445
Arg Asp Ile Arg Lys Ile Gly Leu Glu Arg Lys Glu Tyr Ile Gln Leu
    450                 455                 460
Val Glu Gln Leu Arg Asn Thr Val Ala Leu Asp Ala Asp Ile Ala Ala
465                 470                 475                 480
Gln Lys Leu Phe Trp Ala Asp Leu Ser Gln Lys Ala Ile Phe Ser Ala
                485                 490                 495
Ser Ile Asp Asp Lys Val Gly Arg His Phe Lys Met Ile Asp Asn Val
            500                 505                 510
Tyr Asn Pro Ala Ala Ile Ala Val Asp Trp Val Tyr Lys Thr Ile Tyr
        515                 520                 525
Trp Thr Asp Ala Ala Ser Lys Thr Ile Ser Val Ala Thr Leu Asp Gly
    530                 535                 540
Thr Lys Arg Lys Phe Leu Phe Asn Ser Asp Leu Arg Glu Pro Ala Ser
545                 550                 555                 560
Ile Ala Val Asp Pro Leu Ser Gly Phe Val Tyr Trp Ser Asp Trp Gly
                565                 570                 575
Glu Pro Ala Lys Ile Glu Lys Ala Gly Met Asn Gly Phe Asp Arg Arg
            580                 585                 590
Pro Leu Val Thr Glu Asp Ile Gln Trp Pro Asn Gly Ile Thr Leu Asp
        595                 600                 605
Leu Val Lys Ser Arg Leu Tyr Trp Leu Asp Ser Lys Leu His Met Leu
    610                 615                 620
Ser Ser Val Asp Leu Asn Gly Gln Asp Arg Arg Ile Val Leu Lys Ser
625                 630                 635                 640
Leu Glu Phe Leu Ala His Pro Leu Ala Leu Thr Ile Phe Glu Asp Arg
                645                 650                 655
Val Tyr Trp Ile Asp Gly Glu Asn Glu Ala Val Tyr Gly Ala Asn Lys
            660                 665                 670
Phe Thr Gly Ser Glu Leu Ala Thr Leu Val Asn Asn Leu Asn Asp Ala
```

```
        675                 680                 685
Gln Asp Ile Ile Ile Tyr His Glu Leu Val Gln Pro Ser Gly Lys Asn
    690                 695                 700
Trp Cys Glu Glu Asp Met Glu Asn Gly Gly Cys Glu Tyr Leu Cys Leu
705                 710                 715                 720
Pro Ala Pro Gln Ile Asn Asp His Ser Pro Lys Tyr Thr Cys Ser Cys
                725                 730                 735
Pro Asn Gly Tyr Asn Leu Glu Glu Asn Gly Arg Glu Cys Gln Ser Thr
            740                 745                 750
Ser Thr Pro Val Thr Tyr Ser Glu Thr Lys Asp Val Asn Thr Thr Asp
        755                 760                 765
Ile Leu Arg Thr Ser Gly Leu Val Pro Gly Gly Ile Asn Val Thr Thr
    770                 775                 780
Ala Val Ser Glu Val Ser Val Pro Pro Lys Gly Thr Ser Ala Ala Trp
785                 790                 795                 800
Ala Ile Leu Pro Leu Leu Leu Leu Val Met Ala Ala Val Gly Gly Tyr
                805                 810                 815
Leu Met Trp Arg Asn Trp Gln His Lys Asn Met Lys Ser Met Asn Phe
            820                 825                 830
Asp Asn Pro Val Tyr Leu Lys Thr Thr Glu Glu Asp Leu Ser Ile Asp
        835                 840                 845
Ile Gly Arg His Ser Ala Ser Val Gly His Thr Tyr Pro Ala Ile Ser
    850                 855                 860
Val Val Ser Thr Asp Asp Asp Leu Ala
865                 870
```

<210> 11
<211> 1280
<212> PRT
<213> Homo sapiens

<400> 11

```
Met Asp Leu Glu Gly Asp Arg Asn Gly Gly Ala Lys Lys Lys Asn Phe
 1               5                  10                  15
Phe Lys Leu Asn Asn Lys Ser Glu Lys Asp Lys Lys Glu Lys Lys Pro
            20                  25                  30
Thr Val Ser Val Phe Ser Met Phe Arg Tyr Ser Asn Trp Leu Asp Lys
        35                  40                  45
Leu Tyr Met Val Val Gly Thr Leu Ala Ala Ile Ile His Gly Ala Gly
    50                  55                  60
Leu Pro Leu Met Met Leu Val Phe Gly Glu Met Thr Asp Ile Phe Ala
65                  70                  75                  80
Asn Ala Gly Asn Leu Glu Asp Leu Met Ser Asn Ile Thr Asn Arg Ser
                85                  90                  95
Asp Ile Asn Asp Thr Gly Phe Phe Met Asn Leu Glu Glu Asp Met Thr
            100                 105                 110
Arg Tyr Ala Tyr Tyr Tyr Ser Gly Ile Gly Ala Gly Val Leu Val Ala
        115                 120                 125
Ala Tyr Ile Gln Val Ser Phe Trp Cys Leu Ala Ala Gly Arg Gln Ile
    130                 135                 140
His Lys Ile Arg Lys Gln Phe Phe His Ala Ile Met Arg Gln Glu Ile
145                 150                 155                 160
Gly Trp Phe Asp Val His Asp Val Gly Glu Leu Asn Thr Arg Leu Thr
                165                 170                 175
Asp Asp Val Ser Lys Ile Asn Glu Gly Ile Gly Asp Lys Ile Gly Met
            180                 185                 190
Phe Phe Gln Ser Met Ala Thr Phe Phe Thr Gly Phe Ile Val Gly Phe
        195                 200                 205
```

Thr Arg Gly Trp Lys Leu Thr Leu Val Ile Leu Ala Ile Ser Pro Val
210 215 220
Leu Gly Leu Ser Ala Ala Val Trp Ala Lys Ile Leu Ser Ser Phe Thr
225 230 235 240
Asp Lys Glu Leu Leu Ala Tyr Ala Lys Ala Gly Ala Val Ala Glu Glu
245 250 255
Val Leu Ala Ala Ile Arg Thr Val Ile Ala Phe Gly Gly Gln Lys Lys
260 265 270
Glu Leu Glu Arg Tyr Asn Lys Asn Leu Glu Glu Ala Lys Arg Ile Gly
275 280 285
Ile Lys Lys Ala Ile Thr Ala Asn Ile Ser Ile Gly Ala Ala Phe Leu
290 295 300
Leu Ile Tyr Ala Ser Tyr Ala Leu Ala Phe Trp Tyr Gly Thr Thr Leu
305 310 315 320
Val Leu Ser Gly Glu Tyr Ser Ile Gly Gln Val Leu Thr Val Phe Phe
325 330 335
Ser Val Leu Ile Gly Ala Phe Ser Val Gly Gln Ala Ser Pro Ser Ile
340 345 350
Glu Ala Phe Ala Asn Ala Arg Gly Ala Ala Tyr Glu Ile Phe Lys Ile
355 360 365
Ile Asp Asn Lys Pro Ser Ile Asp Ser Tyr Ser Lys Ser Gly His Lys
370 375 380
Pro Asp Asn Ile Lys Gly Asn Leu Glu Phe Arg Asn Val His Phe Ser
385 390 395 400
Tyr Pro Ser Arg Lys Glu Val Lys Ile Leu Lys Gly Leu Asn Leu Lys
405 410 415
Val Gln Ser Gly Gln Thr Val Ala Leu Val Gly Asn Ser Gly Cys Gly
420 425 430
Lys Ser Thr Thr Val Gln Leu Met Gln Arg Leu Tyr Asp Pro Thr Glu
435 440 445
Gly Met Val Ser Val Asp Gly Gln Asp Ile Arg Thr Ile Asn Val Arg
450 455 460
Phe Leu Arg Glu Ile Ile Gly Val Val Ser Gln Glu Pro Val Leu Phe
465 470 475 480
Ala Thr Thr Ile Ala Glu Asn Ile Arg Tyr Gly Arg Glu Asn Val Thr
485 490 495
Met Asp Glu Ile Glu Lys Ala Val Lys Glu Ala Asn Ala Tyr Asp Phe
500 505 510
Ile Met Lys Leu Pro His Lys Phe Asp Thr Leu Val Gly Glu Arg Gly
515 520 525
Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg Ala
530 535 540
Leu Val Arg Asn Pro Lys Ile Leu Leu Leu Asp Glu Ala Thr Ser Ala
545 550 555 560
Leu Asp Thr Glu Ser Glu Ala Val Val Gln Val Ala Leu Asp Lys Ala
565 570 575
Arg Lys Gly Arg Thr Thr Ile Val Ile Ala His Arg Leu Ser Thr Val
580 585 590
Arg Asn Ala Asp Val Ile Ala Gly Phe Asp Asp Gly Val Ile Val Glu
595 600 605
Lys Gly Asn His Asp Glu Leu Met Lys Glu Lys Gly Ile Tyr Phe Lys
610 615 620
Leu Val Thr Met Gln Thr Ala Gly Asn Glu Val Glu Leu Glu Asn Ala
625 630 635 640
Ala Asp Glu Ser Lys Ser Glu Ile Asp Ala Leu Glu Met Ser Ser Asn
645 650 655
Asp Ser Arg Ser Ser Leu Ile Arg Lys Arg Ser Thr Arg Arg Ser Val
660 665 670
Arg Gly Ser Gln Ala Gln Asp Arg Lys Leu Ser Thr Lys Glu Ala Leu

```
        675                 680                 685
Asp Glu Ser Ile Pro Pro Val Ser Phe Trp Arg Ile Met Lys Leu Asn
    690                 695                 700
Leu Thr Glu Trp Pro Tyr Phe Val Val Gly Val Phe Cys Ala Ile Ile
705                 710                 715                 720
Asn Gly Gly Leu Gln Pro Ala Phe Ala Ile Ile Phe Ser Lys Ile Ile
                725                 730                 735
Gly Val Phe Thr Arg Ile Asp Asp Pro Glu Thr Lys Arg Gln Asn Ser
            740                 745                 750
Asn Leu Phe Ser Leu Leu Phe Leu Ala Leu Gly Ile Ile Ser Phe Ile
        755                 760                 765
Thr Phe Phe Leu Gln Gly Phe Thr Phe Gly Lys Ala Gly Glu Ile Leu
    770                 775                 780
Thr Lys Arg Leu Arg Tyr Met Val Phe Arg Ser Met Leu Arg Gln Asp
785                 790                 795                 800
Val Ser Trp Phe Asp Asp Pro Lys Asn Thr Thr Gly Ala Leu Thr Thr
                805                 810                 815
Arg Leu Ala Asn Asp Ala Ala Gln Val Lys Gly Ala Ile Gly Ser Arg
            820                 825                 830
Leu Ala Val Ile Thr Gln Asn Ile Ala Asn Leu Gly Thr Gly Ile Ile
        835                 840                 845
Ile Ser Phe Ile Tyr Gly Trp Gln Leu Thr Leu Leu Leu Leu Ala Ile
    850                 855                 860
Val Pro Ile Ile Ala Ile Ala Gly Val Val Glu Met Lys Met Leu Ser
865                 870                 875                 880
Gly Gln Ala Leu Lys Asp Lys Lys Glu Leu Glu Gly Ala Gly Lys Ile
                885                 890                 895
Ala Thr Glu Ala Ile Glu Asn Phe Arg Thr Val Val Ser Leu Thr Gln
            900                 905                 910
Glu Gln Lys Phe Glu His Met Tyr Ala Gln Ser Leu Gln Val Pro Tyr
        915                 920                 925
Arg Asn Ser Leu Arg Lys Ala His Ile Phe Gly Ile Thr Phe Ser Phe
    930                 935                 940
Thr Gln Ala Met Met Tyr Phe Ser Tyr Ala Gly Cys Phe Arg Phe Gly
945                 950                 955                 960
Ala Tyr Leu Val Ala His Lys Leu Met Ser Phe Glu Asp Val Leu Leu
                965                 970                 975
Val Phe Ser Ala Val Val Phe Gly Ala Met Ala Val Gly Gln Val Ser
            980                 985                 990
Ser Phe Ala Pro Asp Tyr Ala Lys Ala Lys Ile Ser Ala Ala His Ile
        995                 1000                1005
Ile Met Ile Ile Glu Lys Thr Pro Leu Ile Asp Ser Tyr Ser Thr Glu
    1010                1015                1020
Gly Leu Met Pro Asn Thr Leu Glu Gly Asn Val Thr Phe Gly Glu Val
1025                1030                1035                1040
Val Phe Asn Tyr Pro Thr Arg Pro Asp Ile Pro Val Leu Gln Gly Leu
                1045                1050                1055
Ser Leu Glu Val Lys Lys Gly Gln Thr Leu Ala Leu Val Gly Ser Ser
            1060                1065                1070
Gly Cys Gly Lys Ser Thr Val Val Gln Leu Leu Glu Arg Phe Tyr Asp
        1075                1080                1085
Pro Leu Ala Gly Lys Val Leu Leu Asp Gly Lys Glu Ile Lys Arg Leu
    1090                1095                1100
Asn Val Gln Trp Leu Arg Ala His Leu Gly Ile Val Ser Gln Glu Pro
1105                1110                1115                1120
Ile Leu Phe Asp Cys Ser Ile Ala Glu Asn Ile Ala Tyr Gly Asp Asn
                1125                1130                1135
Ser Arg Val Val Ser Gln Glu Glu Ile Val Arg Ala Ala Lys Glu Ala
            1140                1145                1150
```

```
Asn Ile His Ala Phe Ile Glu Ser Leu Pro Asn Lys Tyr Ser Thr Lys
        1155                1160                1165
Val Gly Asp Lys Gly Thr Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile
    1170                1175                1180
Ala Ile Ala Arg Ala Leu Val Arg Gln Pro His Ile Leu Leu Leu Asp
1185                1190                1195                1200
Glu Ala Thr Ser Ala Leu Asp Thr Glu Ser Glu Lys Val Val Gln Glu
                1205                1210                1215
Ala Leu Asp Lys Ala Arg Glu Gly Arg Thr Cys Ile Val Ile Ala His
            1220                1225                1230
Arg Leu Ser Thr Ile Gln Asn Ala Asp Leu Ile Val Val Phe Gln Asn
        1235                1240                1245
Gly Arg Val Lys Glu His Gly Thr His Gln Gln Leu Leu Ala Gln Lys
    1250                1255                1260
Gly Ile Tyr Phe Ser Met Val Ser Val Gln Ala Gly Thr Lys Arg Gln
1265                1270                1275                1280
```

<210> 12
<211> 1276
<212> PRT
<213> Mus musculus

<400> 12

```
Met Glu Phe Glu Glu Asn Leu Lys Gly Arg Ala Asp Lys Asn Phe Ser
 1               5                  10                  15
Lys Met Gly Lys Lys Ser Lys Lys Glu Lys Lys Glu Lys Lys Pro Ala
            20                  25                  30
Val Gly Val Phe Gly Met Phe Arg Tyr Ala Asp Trp Leu Asp Lys Leu
        35                  40                  45
Cys Met Ile Leu Gly Thr Leu Ala Ala Ile Ile His Gly Thr Leu Leu
    50                  55                  60
Pro Leu Leu Met Leu Val Phe Gly Asn Met Thr Asp Ser Phe Thr Lys
65                  70                  75                  80
Ala Glu Ala Ser Ile Leu Pro Ser Ile Thr Asn Gln Ser Gly Pro Asn
                85                  90                  95
Ser Thr Leu Ile Ile Ser Asn Ser Ser Leu Glu Glu Glu Met Ala Ile
            100                 105                 110
Tyr Ala Tyr Tyr Tyr Thr Gly Ile Gly Ala Gly Val Leu Ile Val Ala
        115                 120                 125
Tyr Ile Gln Val Ser Leu Trp Cys Leu Ala Ala Gly Arg Gln Ile His
    130                 135                 140
Lys Ile Arg Gln Lys Phe Phe His Ala Ile Met Asn Gln Glu Ile Gly
145                 150                 155                 160
Trp Phe Asp Val His Asp Val Gly Glu Leu Asn Thr Arg Leu Thr Asp
                165                 170                 175
Asp Val Ser Lys Ile Asn Asp Gly Ile Gly Asp Lys Ile Gly Met Phe
            180                 185                 190
Phe Gln Ser Ile Thr Thr Phe Leu Ala Gly Phe Ile Ile Gly Phe Ile
        195                 200                 205
Ser Gly Trp Lys Leu Thr Leu Val Ile Leu Ala Val Ser Pro Leu Ile
    210                 215                 220
Gly Leu Ser Ser Ala Leu Trp Ala Lys Val Leu Thr Ser Phe Thr Asn
225                 230                 235                 240
Lys Glu Leu Gln Ala Tyr Ala Lys Ala Gly Ala Val Ala Glu Glu Val
                245                 250                 255
Leu Ala Ala Ile Arg Thr Val Ile Ala Phe Gly Gly Gln Gln Lys Glu
            260                 265                 270
Leu Glu Arg Tyr Asn Lys Asn Leu Glu Glu Ala Lys Asn Val Gly Ile
```

```
        275                 280                 285
Lys Lys Ala Ile Thr Ala Ser Ile Ser Ile Gly Ile Ala Tyr Leu Leu
    290                 295                 300
Val Tyr Ala Ser Tyr Ala Leu Ala Phe Trp Tyr Gly Thr Ser Leu Val
305                 310                 315                 320
Leu Ser Asn Glu Tyr Ser Ile Gly Glu Val Leu Thr Val Phe Phe Ser
                325                 330                 335
Ile Leu Leu Gly Thr Phe Ser Ile Gly His Leu Ala Pro Asn Ile Glu
            340                 345                 350
Ala Phe Ala Asn Ala Arg Gly Ala Ala Phe Glu Ile Phe Lys Ile Ile
        355                 360                 365
Asp Asn Glu Pro Ser Ile Asp Ser Phe Ser Thr Lys Gly Tyr Lys Pro
    370                 375                 380
Asp Ser Ile Met Gly Asn Leu Glu Phe Lys Asn Val His Phe Asn Tyr
385                 390                 395                 400
Pro Ser Arg Ser Glu Val Gln Ile Leu Lys Gly Leu Asn Leu Lys Val
                405                 410                 415
Lys Ser Gly Gln Thr Val Ala Leu Val Gly Asn Ser Gly Cys Gly Lys
            420                 425                 430
Ser Thr Thr Val Gln Leu Met Gln Arg Leu Tyr Asp Pro Leu Glu Gly
        435                 440                 445
Val Val Ser Ile Asp Gly Gln Asp Ile Arg Thr Ile Asn Val Arg Tyr
    450                 455                 460
Leu Arg Glu Ile Ile Gly Val Val Ser Gln Glu Pro Val Leu Phe Ala
465                 470                 475                 480
Thr Thr Ile Ala Glu Asn Ile Arg Tyr Gly Arg Glu Asp Val Thr Met
                485                 490                 495
Asp Glu Ile Glu Lys Ala Val Lys Glu Ala Asn Ala Tyr Asp Phe Ile
            500                 505                 510
Met Lys Leu Pro His Gln Phe Asp Thr Leu Val Gly Glu Arg Gly Ala
        515                 520                 525
Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg Ala Leu
    530                 535                 540
Val Arg Asn Pro Lys Ile Leu Leu Leu Asp Glu Ala Thr Ser Ala Leu
545                 550                 555                 560
Asp Thr Glu Ser Glu Ala Val Val Gln Ala Ala Leu Asp Lys Ala Arg
                565                 570                 575
Glu Gly Arg Thr Thr Ile Val Ile Ala His Arg Leu Ser Thr Val Arg
            580                 585                 590
Asn Ala Asp Val Ile Ala Gly Phe Asp Gly Gly Val Ile Val Glu Gln
        595                 600                 605
Gly Asn His Asp Glu Leu Met Arg Glu Lys Gly Ile Tyr Phe Lys Leu
    610                 615                 620
Val Met Thr Gln Thr Arg Gly Asn Glu Ile Glu Pro Gly Asn Asn Ala
625                 630                 635                 640
Tyr Gly Ser Gln Ser Asp Thr Asp Ala Ser Glu Leu Thr Ser Glu Glu
                645                 650                 655
Ser Lys Ser Pro Leu Ile Arg Arg Ser Ile Tyr Arg Ser Val His Arg
            660                 665                 670
Lys Gln Asp Gln Glu Arg Arg Leu Ser Met Lys Glu Ala Val Asp Glu
        675                 680                 685
Asp Val Pro Leu Val Ser Phe Trp Arg Ile Leu Asn Leu Asn Leu Ser
    690                 695                 700
Glu Trp Pro Tyr Leu Leu Val Gly Val Leu Cys Ala Val Ile Asn Gly
705                 710                 715                 720
Cys Ile Gln Pro Val Phe Ala Ile Val Phe Ser Arg Ile Val Gly Val
                725                 730                 735
Phe Ser Arg Asp Asp Asp His Glu Thr Lys Arg Gln Asn Cys Asn Leu
            740                 745                 750
```

Phe Ser Leu Phe Phe Leu Val Met Gly Leu Ile Ser Phe Val Thr Tyr
755 760 765
Phe Phe Gln Gly Phe Thr Phe Gly Lys Ala Gly Glu Ile Leu Thr Lys
770 775 780
Arg Val Arg Tyr Met Val Phe Lys Ser Met Leu Arg Gln Asp Ile Ser
785 790 795 800
Trp Phe Asp Asp His Lys Asn Ser Thr Gly Ser Leu Thr Thr Arg Leu
805 810 815
Ala Ser Asp Ala Ser Ser Val Lys Gly Ala Met Gly Ala Arg Leu Ala
820 825 830
Val Val Thr Gln Asn Val Ala Asn Leu Gly Thr Gly Val Ile Leu Ser
835 840 845
Leu Val Tyr Gly Trp Gln Leu Thr Leu Leu Leu Val Val Ile Ile Pro
850 855 860
Leu Ile Val Leu Gly Gly Ile Ile Glu Met Lys Leu Leu Ser Gly Gln
865 870 875 880
Ala Leu Lys Asp Lys Lys Gln Leu Glu Ile Ser Gly Lys Ile Ala Thr
885 890 895
Glu Ala Ile Glu Asn Phe Arg Thr Ile Val Ser Leu Thr Arg Glu Gln
900 905 910
Lys Phe Glu Thr Met Tyr Ala Gln Ser Leu Gln Val Pro Tyr Arg Asn
915 920 925
Ala Met Lys Lys Ala His Val Phe Gly Ile Thr Phe Ser Phe Thr Gln
930 935 940
Ala Met Met Tyr Phe Ser Tyr Ala Ala Cys Phe Arg Phe Gly Ala Tyr
945 950 955 960
Leu Val Ala Gln Gln Leu Met Thr Phe Glu Asn Val Met Leu Val Phe
965 970 975
Ser Ala Val Val Phe Gly Ala Met Ala Ala Gly Asn Thr Ser Ser Phe
980 985 990
Ala Pro Asp Tyr Ala Lys Ala Lys Val Ser Ala Ser His Ile Ile Arg
995 1000 1005
Ile Ile Glu Lys Thr Pro Glu Ile Asp Ser Tyr Ser Thr Glu Gly Leu
1010 1015 1020
Lys Pro Thr Leu Leu Glu Gly Asn Val Lys Phe Asn Gly Val Gln Phe
1025 1030 1035 1040
Asn Tyr Pro Thr Arg Pro Asn Ile Pro Val Leu Gln Gly Leu Ser Leu
1045 1050 1055
Glu Val Lys Lys Gly Gln Thr Leu Ala Leu Val Gly Ser Ser Gly Cys
1060 1065 1070
Gly Lys Ser Thr Val Val Gln Leu Leu Glu Arg Phe Tyr Asp Pro Met
1075 1080 1085
Ala Gly Ser Val Phe Leu Asp Gly Lys Glu Ile Lys Gln Leu Asn Val
1090 1095 1100
Gln Trp Leu Arg Ala His Leu Gly Ile Val Ser Gln Glu Pro Ile Leu
1105 1110 1115 1120
Phe Asp Cys Ser Ile Ala Glu Asn Ile Ala Tyr Gly Asp Asn Ser Arg
1125 1130 1135
Ala Val Ser His Glu Glu Ile Val Arg Ala Ala Lys Glu Ala Asn Ile
1140 1145 1150
His Gln Phe Ile Asp Ser Leu Pro Asp Lys Tyr Asn Thr Arg Val Gly
1155 1160 1165
Asp Lys Gly Thr Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile
1170 1175 1180
Ala Arg Ala Leu Val Arg Gln Pro His Ile Leu Leu Leu Asp Glu Ala
1185 1190 1195 1200
Thr Ser Ala Leu Asp Thr Glu Ser Glu Lys Val Val Gln Glu Ala Leu
1205 1210 1215
Asp Lys Ala Arg Glu Gly Arg Thr Cys Ile Val Ile Ala His Arg Leu

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            1220                1225                1230
Ser Thr Ile Gln Asn Ala Asp Leu Ile Val Val Ile Glu Asn Gly Lys
        1235                1240                1245
Val Lys Glu His Gly Thr His Gln Gln Leu Leu Ala Gln Lys Gly Ile
    1250                1255                1260
Tyr Phe Ser Met Val Gln Ala Gly Ala Lys Arg Ser
1265                1270                1275
```